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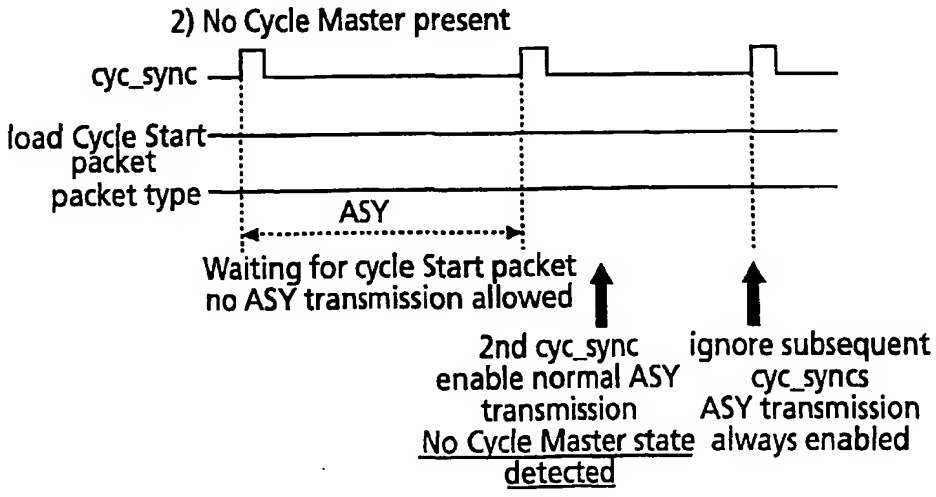
(54) Title: DATA LINK LAYER DEVICE FOR A SERIAL COMMUNICATION BUS



(57) Abstract: According to the IEEE1394 bus protocol manage the mixed data transfer in one cycle it is specified that the bus nodes having only asochronous data to transfer need to wait with their transmission requests until the end of isochronous data transfers in the cycle indicated with a sub-action gap. The invention aims to improve the efficiency of data transport for the case that one of the bus nodes need to transfer isochronous data. The data link layer devices according to the invention includes means for checking whether isochronous data is to be transferred and if not they switch over to a no cycle master state, in which the local cycle synchronization events are ignored. The nodes need not wait for a sub-action gap after a local cycle event before drawing asynchronous transmission requests.

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